

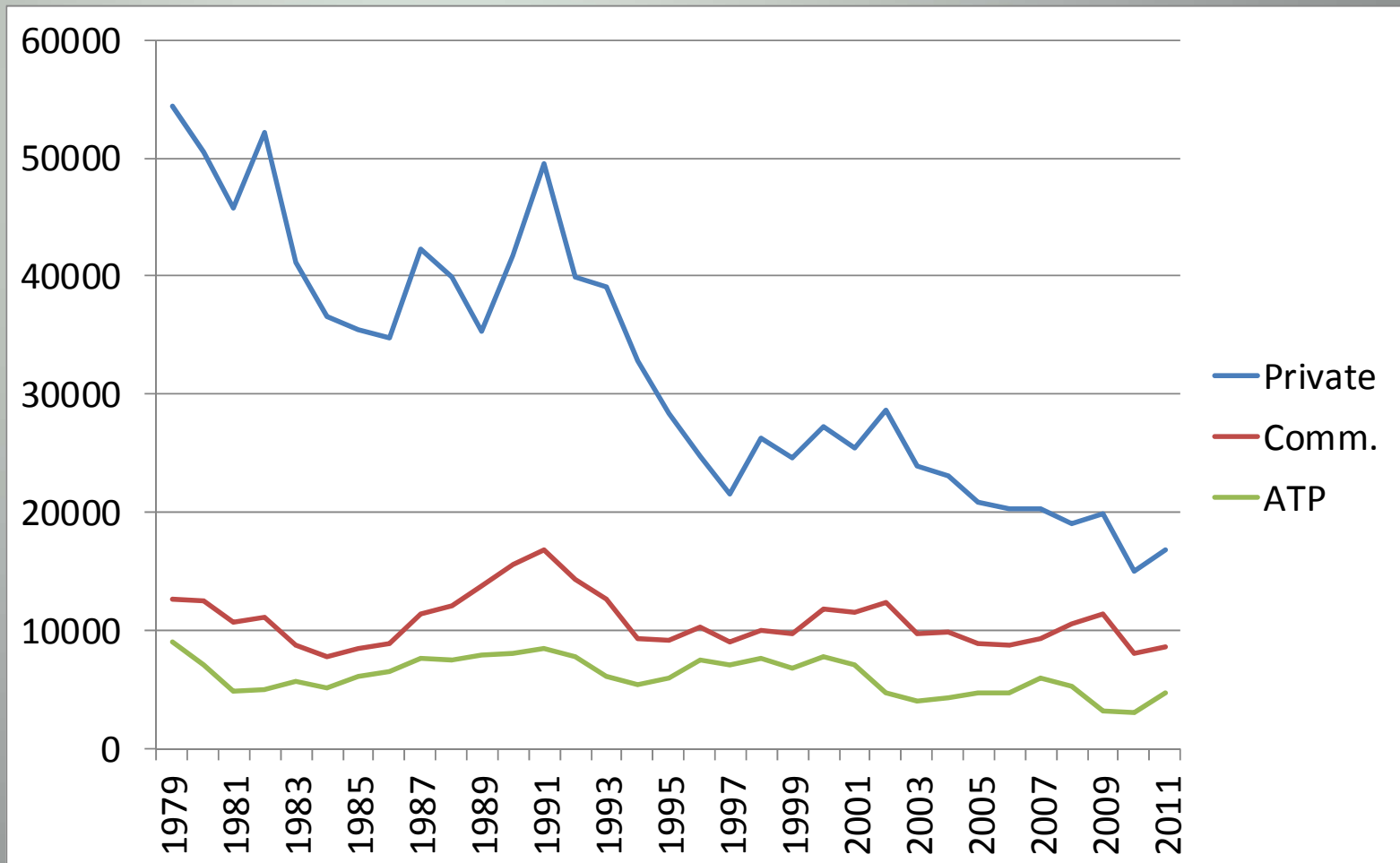
U.S. Pilot Labor Supply

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Pilot Certificates Issued (FAA and GAMA)



Trends in Pilot Supply

Student Pilot Certificates Issued

- 1991: 82,205
- 2011: 55,298
- Reduction of 33%

Private Pilot Certificates Issued

- 1991: 49,580
- 2011: 16,802
- Reduction of 66%

Source: 2011 FAA Airmen Statistics



Trends in Pilot Supply

Commercial Pilot Certificates Issued

- 1991: 16,868
- 2011: 8,559
- Reduction of 49%

ATP Certificates Issued

- 1991: 8,437
- 2011: 4,677
- Reduction of 45%

Source: 2011 FAA Airmen Statistics



Trends in Pilot Supply

Average Age 1991

- Private : 42.0
- Commercial: 42.2
- ATP: 43.6

Average Age 2011

- Private: 47.9
- Commercial : 44.4
- ATP: 49.7

Source: 2011 FAA Airmen Statistics

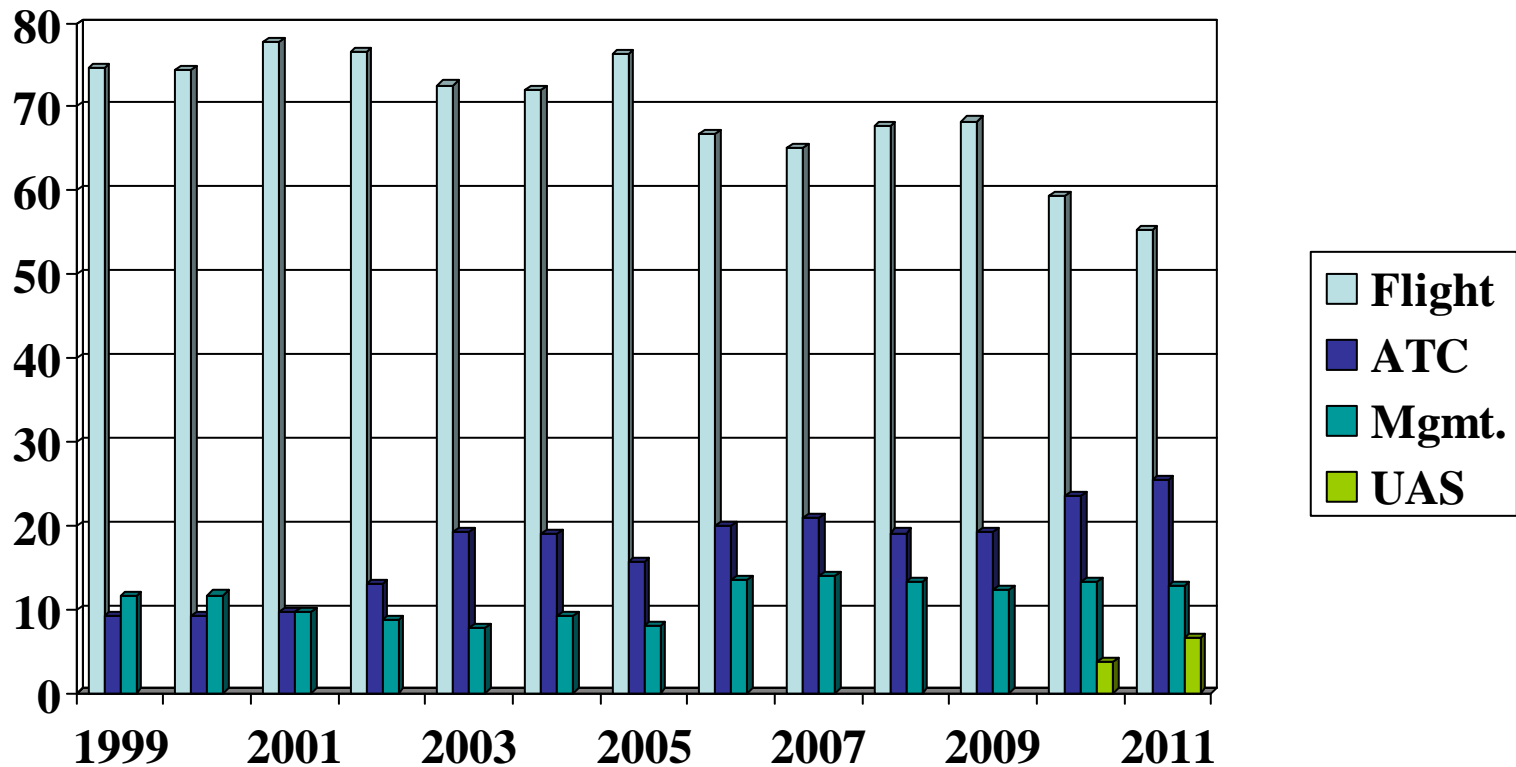


Career Aspirations Study

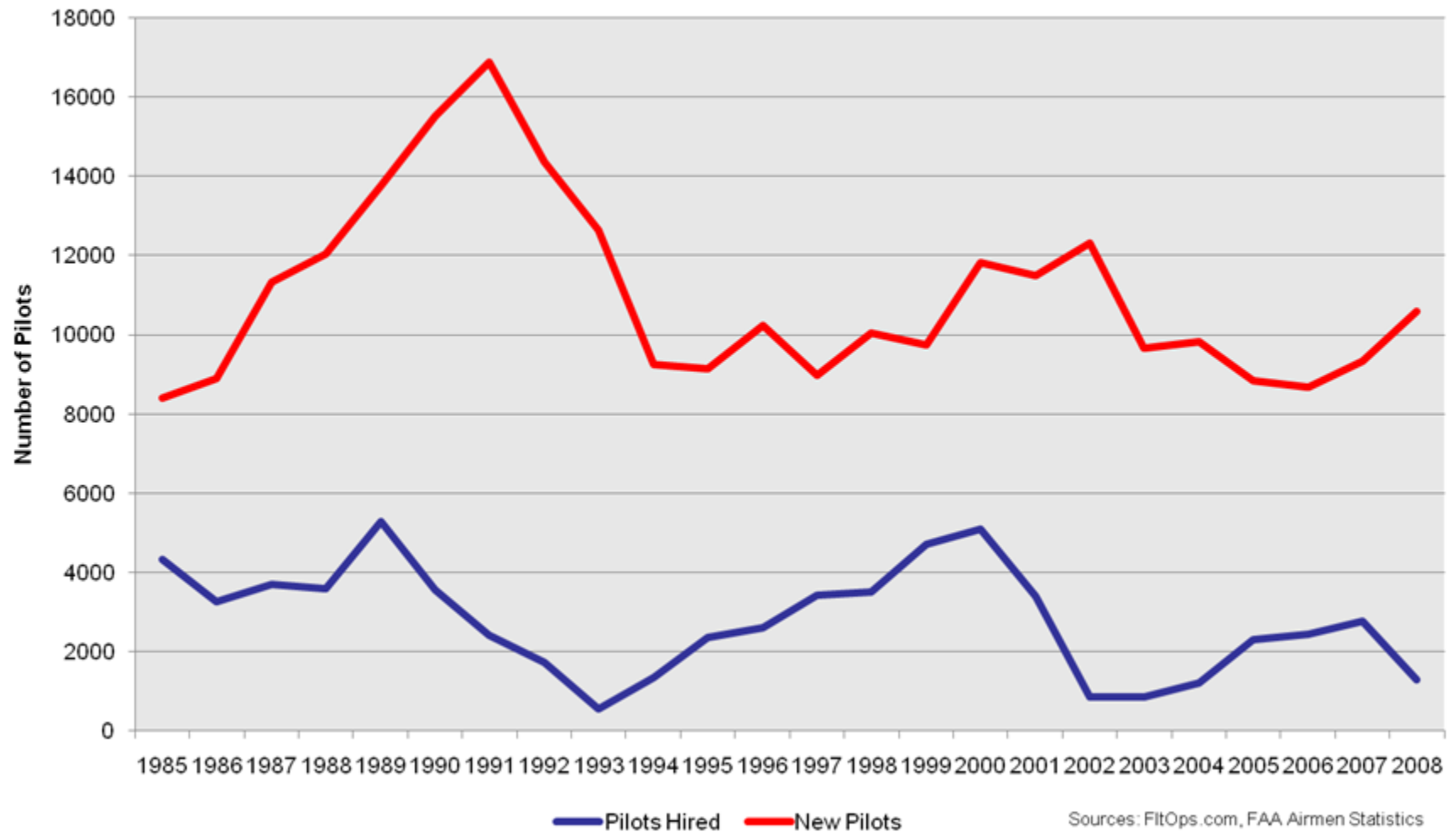
- Participants
 - Sample (N=240) includes responses from instructor pilots at 17 different university flight programs
- Preliminary Results
 - Initial Career Aspirations (When flight training began)
 - 69.2% aspired to be airline pilots
 - Current short term (next five years) Career Aspirations
 - 46.3% aspire to be airline pilots
 - Current long term Career Aspirations
 - 37.9% aspire to be airline pilots



Distribution of ≈ 1300 Aviation Majors by Percentage (Fall Count)



Historical Pilots Hired at Major Airlines vs. New Commercial Pilots Created



Long Term Forecast

Reason	New Pilots Required 2012-2031
Retirement (2.1% annually)	129,383
Aircraft Additions	40,917
Other Attritions* (5.09%)	138,414
Total	308,714

*Using a low rate of 2.50%



- The UND Forecast Surplus/Shortfall

Supply derived from model

$$Y = 1.28(X) - 153(Z) + 7868;$$

where: y = New commercial pilots in 2 years

 x = Pilots hired at a major airline, and

 z = Percent change year-over-year in
flight training costs

- Demand derived from FAA forecast aircraft, retirements and other attrition

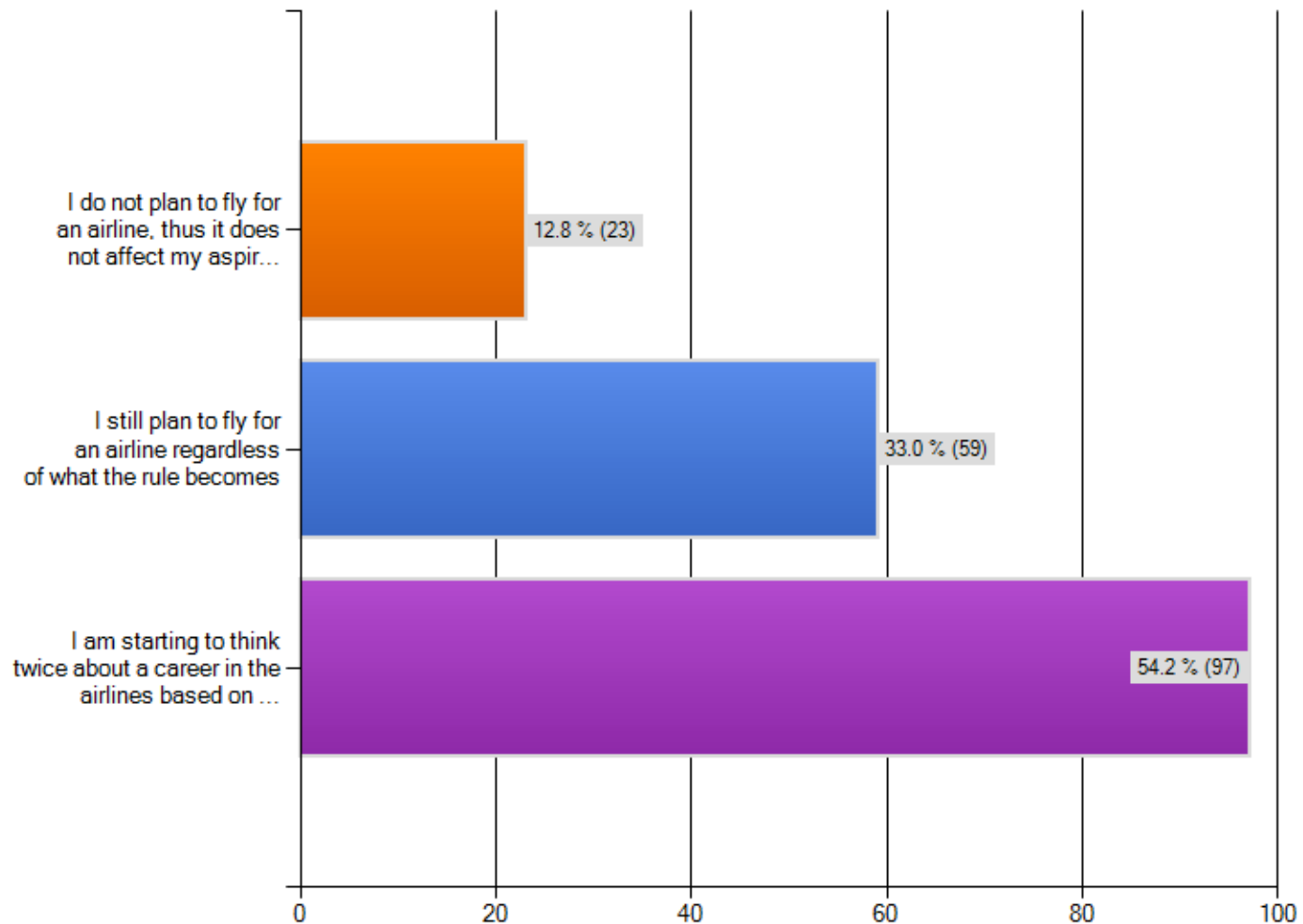
- Forecast in a nutshell:

- Between 2012 and 2031, there will be a 38,178 pilot shortfall
- This shortfall is for all commercial operations



NPRM Career Aspirations

If these proposed rule changes get approved, how does it affect your career aspirations?



- Unintended Consequences of ATP Requirements
 - How many potential pilots will decide on another career?
 - Recent UND data indicates 54.2% would reconsider their career choice if the NPRM was finalized
 - Taking half of that number (27.1%), from 2013-2031, there will be an estimated loss of 74,022 pilots
 - With only a 10% impact, there would be a loss of 27,315 pilots
 - This is in addition to the current projected shortfalls with status quo ATP requirements



Mitigation Strategies

- Securing Supply
 - Airline involvement in student recruitment and career education
 - Airline sponsored career path
 - JetBlue/Cape Air
 - ExpressJet/Delta
 - Airline help with loan consolidation with reduced interest rates
 - Airline sponsored scholarships/student debt retirement
 - Sponsored Ab Initio flight training

